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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/571,661

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EXAMINER

TOLIN, MICHAEL A

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/571,661	<b>Applicant(s)</b> STUTZ, JOSEF	
	<b>Examiner</b> MICHAEL A. TOLIN	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 16-33 is/are pending in the application.
- 4a) Of the above claim(s) 24-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10-16-2006</u> .                                              | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of claims 16-23 in the reply filed on 06 February 2009 is acknowledged.

The requirement is still deemed proper and is therefore made FINAL.

In response to Applicant's arguments against the previous restriction, a common special technical feature between the claimed method and the claimed apparatus is lacking for the reasons set forth below in the prior art rejections. Accordingly, restriction is still considered proper.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Winkler (US 4510184).

Winkler teaches a method of gluing wood fibers comprising the steps of pressurizing and conveying glue to a plurality of nozzles at a pressure of 120 bar and atomizing the glue to apply it to the wood fibers (column 1, lines 7-18; column 3, lines

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22-50; Example). As to the flow rate, the example teaches a flow rate of 600 kg/h of isocyanate glue using 2 nozzles which corresponds to about 300 kg/h of glue for each nozzle. Assuming a glue density of about 0.8 g/cm<sup>3</sup>, this corresponds to a flow rate of about 6 L/min from each nozzle. As to the claimed curtain of wood fibers, Winkler teaches that the wood fibers travel as a dispersed film that widens out along flow lines 13 (Figure 2; column 4, lines 33-54). While the examiner acknowledges that the curtain described by Applicant's specification is different than the curtain disclosed by Winkler, it would be improper for the examiner to read limitations from the specification into the claims. Since the claims in the specification do not clearly define the term curtain, the examiner must give this term its broadest reasonable interpretation. Accordingly, a curtain is considered to be satisfied by any sheet of wood fibers.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 16, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roll (US 7182831) in view of Winkler (US 4510184).

Roll teaches a method of gluing wood fibers comprising the steps of forming a curtain of wood fibers and providing a flow of atomized glue to the wood fibers (Figure

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1; column 3, lines 30-57). As to the use of nozzles to provide the atomized glue using a pressure and flow rate within the claimed range, it is first noted that Roll is directed to a throughput in excess of 10 tons of fiber per hour (column 2, lines 33-43). Winkler is directed to a throughput on the same order (Example), and as noted above in the rejection of claim 16, Winkler suggests the use of two nozzles having a flow rate and a pressure within the claimed range for providing a suitable supply of atomized glue. Since Roll does not provide particular details as to providing a source of atomized glue, one of ordinary skill in the art would have been expected to look to the prior art for suitable known methods, such as that of Winkler. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the source of atomized glue of Roll using glue pressurized to a pressure within the claimed range and at a flow rate within the claimed range from atomizing nozzles because one of ordinary skill in the art would have been motivated to provide a suitable source of atomized glue using known methods as evidenced by Winkler.

Regarding claims 22 and 23, the primary reference to Roll is directed to the manufacture of fiberboard (column 1, lines 5-17). The limitations of claims 22 and 23 are conventional in the art of fiberboard manufacture for providing the finished board from the glued wood fibers. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the limitations of claims 22 and 23 because one of ordinary skill in the art would have been motivated to manufacture a fiberboard from the glue fibers of Roll in accordance with conventional method steps.

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6. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roll in view of Winkler as applied to claims 16, 22 and 23 above, and further in view of King (US 4263091) and Christen (US 4572845).

Roll does not recite a pressure within the claimed range of claim 17. However it is generally well known in the art that good atomization only occurs within a particular pressure range. For example, King teaches that good atomization requires maximum pressure drop across the spray nozzle, especially when spraying viscous polymer solutions (column 1, lines 9-49). It is clear from King that the pressure is a result effective variable for achieving good atomization. Accordingly, one of ordinary skill in the art would have been expected to determine a suitable glue pressure as a matter of routine experimentation to achieve good atomization. Christen is cited to show that a pressure of about 40 bar is known to be suitable for conventional glues such as phenol and urea glues (column 6, lines 18-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to pressure as the glue to a pressure within the claimed range because one of ordinary skill in the art would have been motivated to select a suitable pressure for good atomization as a matter of routine experimentation in view of the teachings of King and the pressure suggested by Christen.

Regarding claim 18, Christen suggests the use of a speed regulated pump (column 4, lines 64-66) for pressurizing the glue. While Christen does not specify details of the pump, the claimed limitations are well known in the pump art for allowing control of flow rate and/or pressure. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the pump limitations of claim 18 because

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one of ordinary skill in the art would have been motivated to control flow rate and/or pressure using a suitable well known pump.

7. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roll in view of Winkler as applied to claims 16, 22 and 23 above, and further in view of Barnstead (US 2549563).

The use of a urea resin and glues having a proportion of glue within the claimed range is generally well known in the art. For example, see Barnstead (column 3, lines 25-67). Barnstead explains that the bonding material should contain as little volatile substance as possible to avoid cracking upon molding and drying. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a urea resin glue having a proportion of glue within the claimed range because one of ordinary skill in the art would have been motivated to use suitable known compositions as evidenced by Barnstead or because one of ordinary skill in the art would have been motivated to use a known suitable glue and high glue concentration to avoid cracking in accordance with the teachings of Barnstead.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL A. TOLIN whose telephone number is (571)272-8633. The examiner can normally be reached on M-F 9am to 5:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael A Tolin/  
Patent Examiner, Art Unit 1791